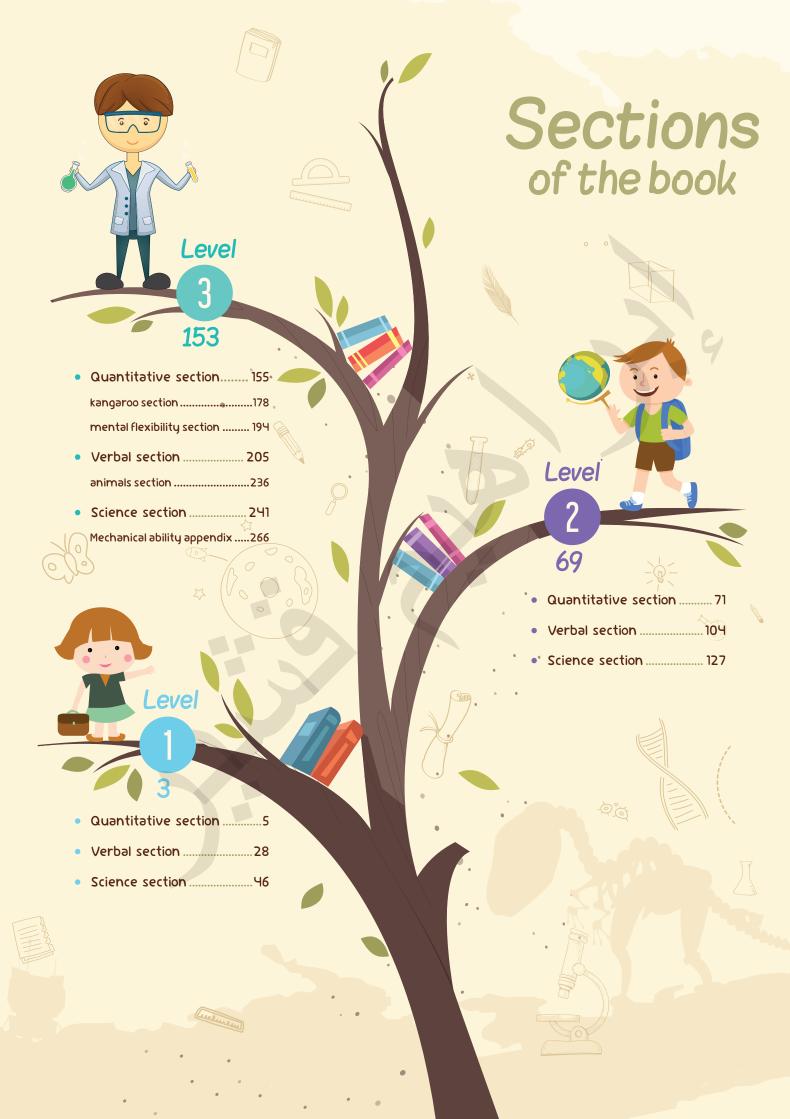


More than 10000 Solved Questions & Practices

Develops 6-18 Year-Old Kids and youth Skills & Abilities

Ibrahim Kosheer

Educational Consultant & Certified Trainer





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First round

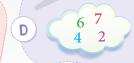


Which cloud contains only numbers less than 7?









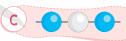


Which figure shows a part of this necklace?





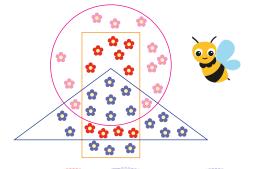








The bee collects nectar from all the flowers inside the rectangle located outside the triangle?



A

B

10

C

13

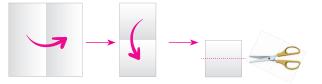
4

(D)

17



Hind folded a paper twice and then folded it as shown in the figure. How many pieces she will have in the end?



A

2

9

B

3

(C)

D

5





At the entrance of the zoo there are 12 children in the queue. Layla is the 7th from the front and Hamzah is the 2nd from the back. How many children are there between them?



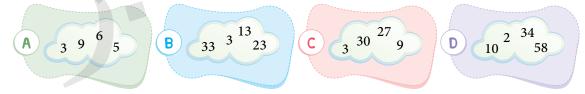
14

The following figure shows the non-stop flight from Jeddah to Dammam. Calculate the flight from Riyadh to Dammam?



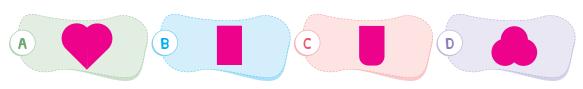
15

Which cloud only contains even numbers?





A figure has been cut into three pieces. Which figure should have been cut?







Answer key

First round

- [1>
- (C)
- 2
- (D)
- [3]
- (A)
- 4
- (B)
- 5
- (C)
- **[6**)
- (A)
- [7]
- (D)
- [8]
- (D)(B)
- [] [10]
 - (B)
- [11]
- (C) (B)
- 12 13
- (A)
- 14
- (D)
- 15
- (D (A)
- 16
- [17] (D
- 18 (B)

- 19
- (c)
- 20
- (B)

Second round

- [1>
- (c)
- [2]
- (D)
- [3] (A)
- 4 (c)
- 5 (c)
- (B) 6
- 27 (B)
 - 8 D
- 9 A
- [10] (A)
- [11] (D)
- [12] (B)
- 13 (A)
- 14 (c)
- 15 (A)16 (D)

- [17]
- В
- 18 (c)
- 19 B 20 (c)
- 21 D

Third round

- B
- B
- D
- B 4
- 5 **[6** (c)
- [7] (B)
- [8] (A)
- (e) D
- [10] (c)
- [11] (D)
- 12 (B) 13 **C**

- 14
- A
- 15 A
- 16 A
- 17 B
- 18 D
- [19] (c)
- 20 (A)21 D

20



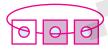


Third round answers



B

When imagining the shape, the correct choice is



3 brothers



3 sisters

Mohammed





4 sisters

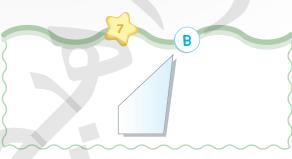


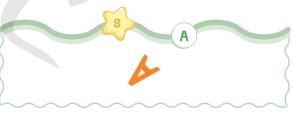


5 + 15 + 40 + 50 = 110



We need 9 tiles to fill the inside area







The weight of the two cats = 5 kg. The weight of one cat = 2.5 kg.



The answer is = 5



verbal symmetry



Select the words that give a similar relationship:



The relationship between chick and hen, the same as the relationship between

- A Camel and carnival
- Rooster and fox
- C Purl and water
- Cub and lion



The relationship between the eraser and the writing is the same as the relationship between

- Hot and air-conditioned
- B Medication and disease
- (c) Writing and pen
- D Ruler and drawing



The relationship between apples and oranges, like the relationship between

- A Sun and day
- B Ducks and chickens
- Cave and mountain
- D) Camel and cat



week day

- ?
 - 1

- A 10
- B 30
- **C**)
- D 365



What word fills the blank: tiger:

- A Deer
- В Mouse
- **C** Rabbit
- D Leopard



tall

short

rich

- A miser
- В
 - poor
- C beautiful
- D ugly





pictures of correlation and difference



 $You \ got \ 4 \ pictures, 3 \ of \ them \ have \ a \ specific \ relation \ in \ common. \ Choose \ the \ different \ picture:$













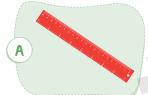
























































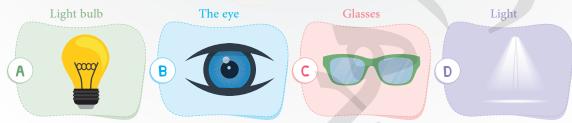




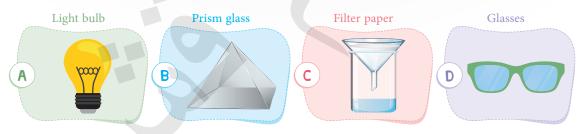
First round



Humans need to see.



The tool we use to analyze white light into multiple colors



The arrow in the following image is pointing to an experiment of what light is made of



- A Color spectrum B
 - B Eye
- C Prism glass
- D Lens



When you wear yellow glasses, you see things in this color:



- A Red
- B Blue
- C Green
- D Yellow



Second round



Which of the following refers to living things only?

A Clouds, fire, rivers

B Fire, rivers, trees

C Rivers, birds, trees

D Birds, trees, worms



Which of the following pictures does not represent the insect?



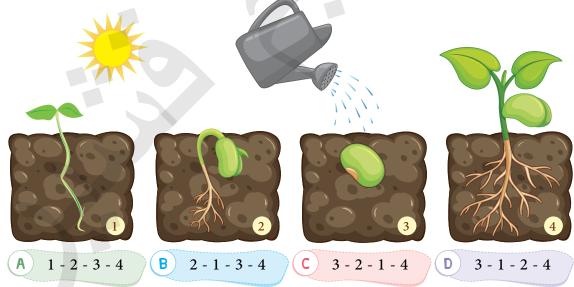








What is the order of the bean plant growth stages?





The moon does not produce light, yet it is bright at night. Why?

- A The moon reflects illumination from the sun.
- B The moon rotates at a very high speed.
- C The moon is covered with a light layer of snow.
- D The moon has a lot of craters.



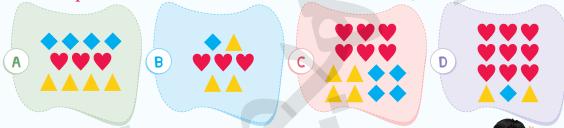
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First round

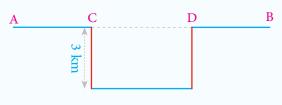
At any of the following shapes, the number of hearts represents three quarters of the shapes?



If the fastest contestant is standing on the podium, who is the third one?



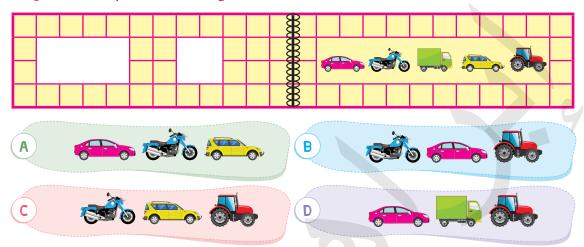
- A A B B C C D E
- In the following figure, to travel from city (A) to (B) is a direct road. a diversion was made at points (C), (D) to travel on the connected line, what is the distance that was increased on the road?



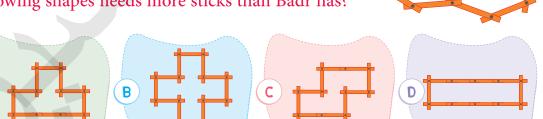
- A 3 km B 5 km C 6 km D 10 km
- What is the sum of: 2001 + 2002 + 2003 + 2004 + 2005
 - A 5010 B 10150 C 11005 D 10015



If the cover of a book was punched as shown in the following figure, which shapes would you see through these two holes if the book was closed?



- Abdullah dries grapes to get raisins. He gets 1 kilogram of raisins from 4 kilograms of grapes. How many kilograms of grapes he needs to make 4 kilograms of raisins?
 - A 12 B 16 C 20 D 50
- Badr used sticks connected together as shown in the following figure to form shapes. Which of the following shapes needs more sticks than Badr has?



Ibrahim and his father went to the theater, their seat numbers were 71, and 72. The following signs indicate seat directions which direction should they follow?

1	from 1	to	20
\Rightarrow	from 21	to	40
(from 41	to	60
1	from 61	to	80
>	from 81	to	100

100









Number of members =

 $5 \times$ the number of teams of five individuals + 6 x The number of teams of six

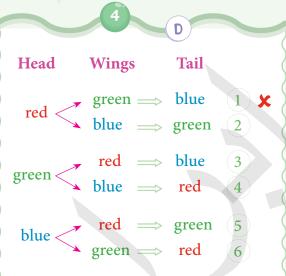
Total team members = 43 (odd number)

That is, the number of participating teams It must be individual

That is, the number of teams of five individuals it must be an odd number

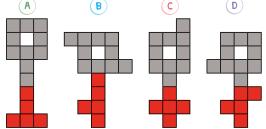
The number of teams of 5 individuals	number of		The number of teams of 6 individuals
1	43 - 5 = 38	Cant be divided by 6	
3	43 - 15 = 28	Cant be divided by 6	
5	43 - 25 = 18	Can be divided by 6	3 teams

Which is that the total number of teams = 5 + 3 = 8 teams

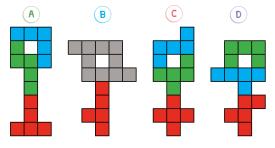


The number of possible cases is 6, including the first case (red - green - blue) ie
We have 5 additional cases.



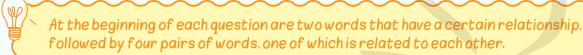


Note that: B is symmetric when divided the two parts are identical, the rest of the shapes can be, Splitting the rest of it into two different parts.





verbal symmetry



The two words have a relationship similar to the relationship between the two words in the header of the question, choose the correct answer.

- Gill: a fish
 - Lung: rabbit
- B respiration : oxygen (C) Nose : human
- Beak: pigeon

- Hour: time
 - A Minutes: an hour
- В Compass: direction
- C Thermometer: cold
- D Page: a book

- Night and day
 - A Sun: light
- B East: West
- C Lille: a star
- Water: snow

- lion: lair
 - A human : house
 - terrier : snake
- donkey: bray
 - camel: cows

- Dough: bread
 - Water: snow
- B Voice: a word
- Palm: damp
- Butter: milk

- Iron: nail
 - Silver : gold
- B Water: snow
- Melancholy: Farah (D) Child: A man



Select the sentence that fits the space to make sense.

- The relationship between dark and night is like the relationship between
 - A School and student B bananas and fruit C Light and day D Book and pen
- A relationship between the sun and light, such as the relationship between
 - A Diligence and success B generator and energy
 - War and destruction D The car and the street
- The relationship between hand and writing is like the relationship between
 - A The car and the door B the tree and the wicker
 - father and son

 Tongue and pronunciation
- For a relationship between Al-Aqsa Mosque and Al-Quds, such as the relationship between
 - A Arafat and Al-Hajjaj B the Kaaba and Mecca
 - Medina and the Kaaba

 D

 Mount Uhud and Makkah
- For a relationship between a shepherd and a sheep, such as a relationship between
 - A Teacher, teacher B writer and libraries
 - In the farmer and the plantation D Engineer and laboratories
- 12 A relationship between a lion and a lioness, such as a relationship between
 - A Camel and camel B horse and pony C Lamb and lamb D Purl and water
- The relationship between nails and fingers is like the relationship between
 - A Brain, liver B ear and brain C Eye and face D Knee and neck
- 14 The relationship between high and low is like the relationship between
 - A A hungry and thirsty B Rich and poor
 - Moon and night

 D

 Pleased and happy



pictures of verbal symmetry



At the beginning of each question are two pictures associated with a certain relationship, followed by four pairs of pictures, one pair of which are related. The two pictures have a relationship similar to the relationship between the two pictures in the question, choose the correct answer.















































































pictures of verbal symmetry answers









The pharmacy has medicine, and the library has a book.









The eyelid covers the eye, and the nail covers the finger.









Fish lives in water, and tigers are in the forest.









The peel covers the orange, and the wool covers the lamb.



Fruits and vegetables..











A big lion and a small cub



answers of correlation and difference





All are children of animals, except for pony.





All housing except for the street.





Gregorian months except Muharram.





Nouns, and verb draws.





Good qualities except miser a bad trait.





All in the sense of slander except for praise.





All of them are running except to stop.





Harbor



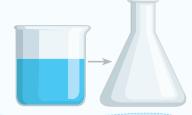
First round

- Water is found in nature in
 - 1 case
- В 2 cases
- C 3 cases
- D 4 cases

- Solids
 - Have a fixed shape and a variable size
- Have a variable shape and fixed size
- Have a fixed shape and fixed size
- Have is only a fixed shape
- When water turns from liquid to ice, the result is



- A Increase the mass
- Increased heat
- Evaporation
- D Low temperature
- A cylindrical container contains 200 cm of water when transferred to a conical container a change happens in



- The shape of the water
- B Size of water
- Shape and volume of water
- No change
- A body with a mass on the surface of the earth is equal to 6 kg. Calculate its weight on the surface of the earth?

6 kg

- 60 N
- B
- C
 - 60 kg
- D





- A person in a darkened room sees clearly through the window, and in broad daylight, he is outside. But the person inside the room cannot see the person outside it.
 - A There isn't enough light to reflect on the person in the room
 - B Light rays cannot cross the window twice
 - © External rays cannot cross the window
 - D Sunlight is not as intense as other light sources
- The schematic diagram indicating the correct position of the batteries?

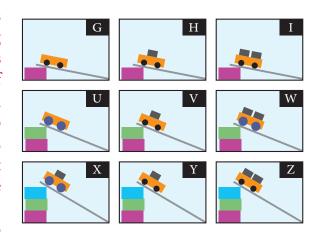


A Only in (K) mode

B Just in the situation (L)

- C Only in (M) mode
- D Mode (K) and Mode (M)
- Oil is an example of a non-renewable natural resource. What is another example of non-renewable resources?
 - A The wood
- B Sea water
- Sun light
- D Charcoal

Osman did it and implemented it using carriages two wheels of different sizes and different numbers of cubes of equal masses. Use the same slope for all attempts and the carriages began to move from different heights. He wants to test this idea: the higher the height the ramp has increased the vehicle access speed towards down the slope. any three attempts should he has to compare them?



A G.H.I B I.W.Z C H.V.Y D U.W.Y









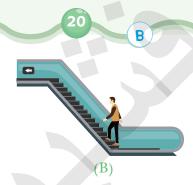
3, 5

Because the rest of the things generate mobile electricity.



The heart

Because it is found in the chest cavity.



Because when two objects move in two directions differently, the resultant velocity is equal to the difference between the two speeds.



Because helium is lighter than air Because the lower the density the more body height up.

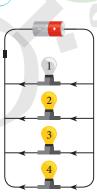


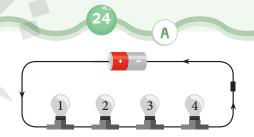
20 Newtons

Because force \times arm = resistance \times arm.



The rest of the lamps are not affected, Because the rest of the lamps are on the condition of connecting in parallel the electric current is not affected with a lamp.





All lights are off;

Because the circuit will be open no electric current will pass.

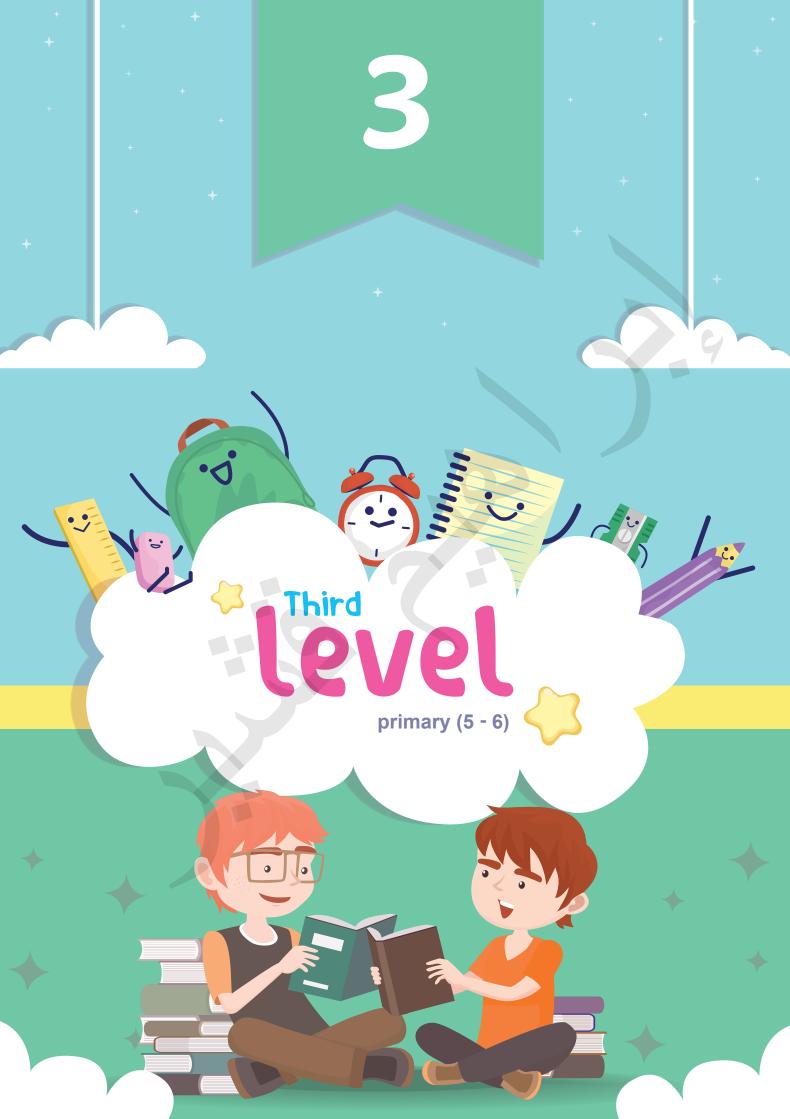


Good conductivity of electricity Because electricity needs elements of metals such as copper.



taste

A physical property that distinguishes between salt and sugar



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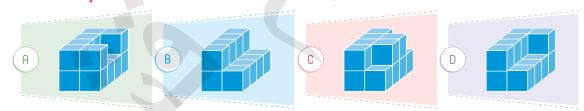


First round

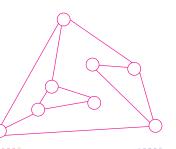
Osama wrote the smallest individual numbers on the sides of the cube (one number on each face). If the cube throws 3 times and collects the numbers that appear on the top face each time, which options can't represent the total he's got?



- A
- 13
- (B)
- 19
- C
- 20
- D
- 21
- Mashal painted the following figures, which one of these shapes needs the largest amount of paint?



In the opposite shape, the circles represent lamps connected to other lamps. At first all the lamps are turned off. If you touch one of the lamps then this lamp and all the lamps next to it are on (the two lamps are adjacent if they are connected to a straight piece). What minimum number of lights should be touched in order to light all the lamps?



- (A)
- 2
- (B)
- 3
- C
- 4
- D
- 5
- Adel folded a sheet of paper. Then cut in them after folding one hole. After he opened the paper again it was shaped. What was Adel's way of folding the paper?









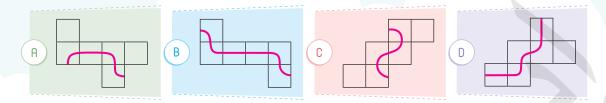




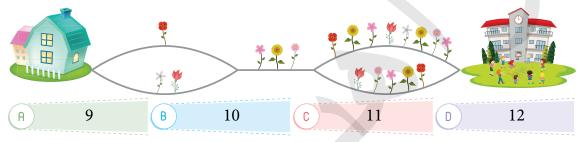








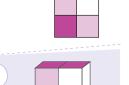
Ahmed moves from the garden to the school counting the flowers on his way. Which of the following cannot be a number watched flowers.



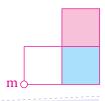
Positive integers are written on the faces of the cube shown in the figure (Three of them are already apparent), so the product of any two numbers is by two opposite sides always produce the same. How many fewer possible numbers is the sum of the numbers on the six faces of the cube?

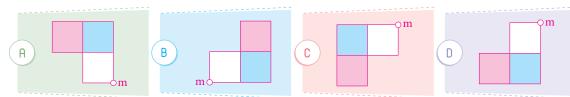


- A 36 B 37 C 41 D 44
- Yusef folded the next carton into a box of the type $(1 \times 1 \times 2)$ Which of the following pictures does not show this box?



- B C D
- 9 If the opposite shape is rotated around at an angle of 180° Which of the following pictures is the resulting shape?







Third round answers



The squares perimeter = length of the side $\times 4$ = 48

Length side = $48 \div 4 = 12 \text{ cm}$

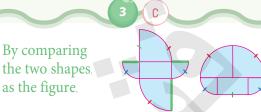
The length of the new triangle = 12 + 12 = 24 cm, and its width = $12 \div 2 = 6$ cm

Rectangle's perimeter = $(length + width) \times 2$ $=(24+6)\times 2=30\times 2=60$ cm.



The gears that cause motion and have the same number of teeth. The first gear has 30 teeth, and the last gear has 10 teeth.

> It means that the first gear has triple of the last gear.



We find that the increase in the shape on the left is the length of the rectangle the width of the rectangle, which means the difference = 20 cm.

By comparing

as the figure.



By adding the first and second scales we find that:



by deleting the similar shapes:



We find that the weight of **D** is greater than two than C

That is, one of the balls weighs more than twice The other and this is achieved for balls 80 and 30

That is, ball **D** has a weight of 80 g. Ball C weighs 30 g.

The first kangaroo moves from the two adjacent three moves.



Then follows the next move (5 moves)



And the last, another 5 moves.



The difference = 1 10000 - 9999 = 1



If Alaa goes first, he will pick all the numbers marital and only singles will remain, and this did not happen where all of them chose even numbers

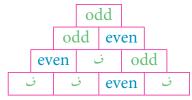
⇒ Alaa is the last person Salem loves numbers that are divisible by 5 but Badr chose one of them ⇒ Badr went before Salem

Correct order (Badr – Salem – Alaa)



We start from the top with an odd number Below it must be two numbers, one of which is odd and the other even (we get

the largest number of odd numbers) and so on with the number down the even is two odd numbers.

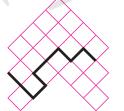


Number of odd numbers = 7





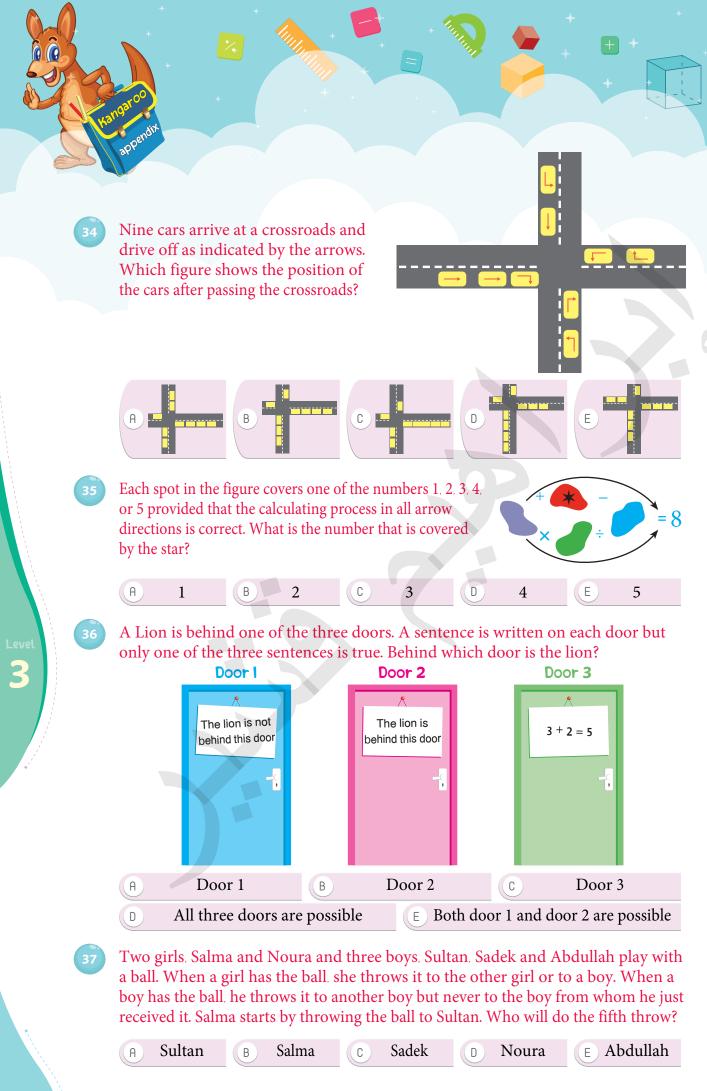
- . There is only one correct answer for each question.
- . Shade the correct answer of each question in the answer sheet.
- The figure shows a board where each small square has an area of 4 cm². What is the length of the thick black line?



- (A) 16 cm
- B 18 cm
- (c) 20 cm
- D 21 cm
- (E) 36 cm
- Which of the following fractions is smaller than 2?
 - A $\frac{19}{8}$
- $\frac{20}{9}$
- $\frac{21}{10}$
- $\frac{22}{11}$
- $\frac{23}{12}$
- Ahmed starts counting at the number 19 and keeps counting until 89. if he takes one second to say each number how long does it take to count all the numbers?
 - A 1 min 10 s
- 1 min 29 s
- c 1 min 11 s

- 1 min 19 s
- E 1 min exactly
- Starting with 555 groups each containing 9 rocks we pile all these rocks together into one pile. We then divide this new pile into groups with 5 rocks each. How many new groups do we get?
 - (A) 111
- B 999
- c 45
- D 555
- 900
- Saad cuts a pizza into quarters. then he cuts every quarter into thirds. What part of the whole pizza is one of the pieces?
 - A a third B a quarter C a seventh

 D an eighth E a twelfth



46 C

Dalal has two ways to choose three numbers which have the sum 8: (1, 2, 5) or (1, 3, 4)

Fatema has only one way to choose three numbers which have the sum 7: (1, 2, 4)

There are two common numbers (1, 2) with the first choice for Dalal, (1, 4) and the second choice for Dalal.

47 D

The similar digits must be consecutive at any order. It means that we cannot have an order which have a digits between two similar digits as in D.

Explanation:

When A > B > C the order is: AAABBC

When A > C > B the order is: AAACBB

When B > A > C the order is: BBAAAC

When B > C > A the order is: BBCAAA

When C > A > B the order is: CAAABB

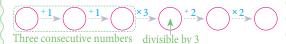
When C > B > A the order is: CBBAAA

48 C

Notice that any three consecutive numbers, only one of them can be divided by 3

Three consecutive numbers

The number multiplied by 3 can be divided by 3



And when adding 2, the sum cannot be divided by 3, and so is the profuct.

49 B

The sum of the numbers from 2 to 10 = 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 + 10 = 54

It is required to divide them into groups; and therefore, in each group there is one of the divisors of 54

The divisors of 54 are: 1, 2, 3, 6, 9, 18, 27, 54

Number 10 must be in one of the groups; therefore, the sum less than 10 must be excluded

It means that we cannot form groups in which the sum is less than 10 (1, 2, 3, 6, 9)

Therefore:

The sum 54 ⇒ (one group, all numbers)

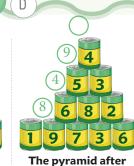
The sum 27 \implies two groups (8, 9,10). (2, 3, 4, 5, 6, 7)

The sum $18 \Longrightarrow$ three groups (8, 10), (2, 7, 9), (3, 4, 5, 6)

This means that the largest number of groups is 3 groups



The Pyramid after Jasser's throw



The pyramid after Waleed's throw

By comparing the places of the missing cans in the two pyramids

We find that the sum of Jasser's throws = 3+8+2+3+4+ the top can = 25

20+ the top can = 25 the top can = 5

The sum of Waleed's throws = 8 + 4 + 9 + 5 = 26



Which of the following forms does not belong to the rest of the group?

A A









2

If: ○ × □ = 20

○ × △ = 12

△ × □ = 15

 $S_{0:} \bigcirc \times \square \times \triangle = \dots$

A

40

B

45

60

D

80

Which of the following forms does not belong to the rest of the group?

A



В











Find the value of x in the following box:

6 29

8 24

8 21 12 *x*

12 X

A

14

- 3)
- (C)
- 22
- D)
- 25

In the adjacent figure find the value of x.





- A
- 11
- В
- 12

16

- (c)
- 14
- D
- 16

- In the following forms; Find the value of the square.
- _ + \(\triangle + \(\triangle + \) = 17
- □ + △ + △ + = 14
- _ + _ + _ + _ = 16

- A
- 2
- B
- 3
- (C)
- 6
- D
- 9



verbal symmetry



Choose the word that fits the space to give a common relation.

C	$\sim\sim$	~~~	~~	$\sim\sim$	\sim	$\sim\sim$	$\sim\sim$	$\sim\sim$
	The rela	tionship bet	tween th	e playing field	and the	ball is like the	relation	ship between
	A	Sea	a and fis	sh	В	Paper	r and bo	ok
	C	flower	s and ga	ırden	D	teacher	and stu	dent
2	The relat	ionship betw	veen the	second floor and	d the firs	t floor, such as t	the relatio	nship betweer
	A	Sea	and oce	ean	В	Bridg	e and riv	ver
	C	The sea	a and th	e ship	D	the egg a	nd the cl	nicken
3	The rela	ationship b	etween	water and sno	w, such	as the relation	onship be	etween
	A Butt	er and yogur	t B V	Vet and palm	C D	ough and bread	D Ste	eam and gas
4		ationship be	etween	fast and vigor	ous, suc	th as the relat	ionship l	oetween
	A	Buy	В	Be guided	С	straddle	D	sold
5		tionship be hoarder an		iscontentment	and co	mplacency, su	ch as the	relationship
	A	Empty	В	Full of	(C)	Small	D	Long

Beautiful and dazzling

Director and the next

A

C

The relationship between the finite, and the family, such as the relationship between

В

(D

The gloomy, the faint

high and lofty

pictures of verbal symmetry



 $Choose \ the \ picture \ that \ fits \ the \ space \ to \ give \ a \ common \ relation.$





































3

















4



















sentence completion



- The names of Heaven varied, including: Aden, Maui, Vinegar, and Firdaws, and accordingly, Firdaws is a place for
 - A Torment B Except C the death D Tired
- Saad planted some types of roses in his garden, including: cloves, daffodils, and tulips: accordingly, tulips are used for a purpose
 - A eater B storage C decorations D treatment



أصوات الحيوانات وغيرها

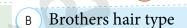
lion		roar	frog		croak
snake	3	Hissing	bee		Two humming / boom
horse		Neighing	dog		barking
donkey	0	braying	mouse		squeak
wolf		howling	elephant		Binge out
cow		bellow	crow/owl	The state of the s	whoop
cat		meow	fly		zoom



First round

Some people have straight hair and some have frizzy hair. What causes some to be born with curly hair and others with smooth straight hair?

Variety of parents' hair

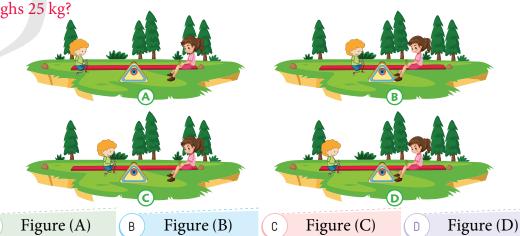


c Their skin color

- Their hair color
- Which of the following statements about the food chain shown above is correct?



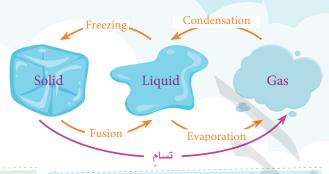
- (A) Field mice eat locusts and grass
- B Locusts eat grass and field mice
- c Snakes eat field mice
- D Snakes eat grass
- A girl wanted to play on a seesaw with her little brother. Any picture that shows the best way for a girl who weighs 50 kg (kilograms) to balance with her brother who weighs 25 kg?







During freezing, fusion and boiling, Water transforms from one state to another. which of the following situations need to exist heat to occur



Just boiling

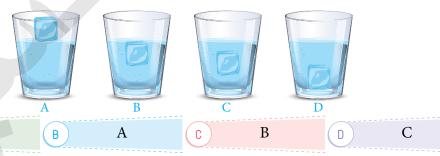
Fusion only

Fusion and freezing

- Melting and boiling
- A stone was placed on the scales in three ways. What does a Libra refer to?

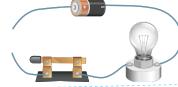


- Scales (1) refer to the largest weight Scale (2) denotes the largest weight
- - Scales (3) denotes the largest weight (D) All scales refer to the same weight
- An ice cube was placed in a glass of water which of the following figures shows the correct position of the ice cube in the water?



- Which of the following things dissolves in water?

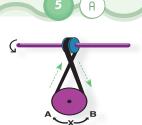
 - Iron filings Sawdust The sand Sugar An electrical circuit consisting of a lamp,
- a battery, and some wires As in the figure. Why does the lamp not light up?



A cut in the wire

D

- The lamp doesn't work
- The battery doesn't work
- The lamp needs a bigger battery



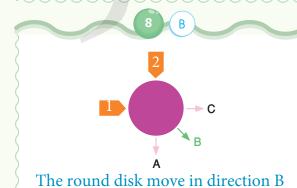
If gears are connected by a chain or belt then they move in the same direction.

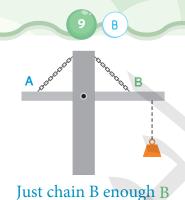


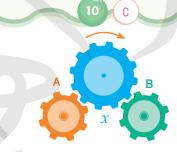
If the left gear turn in the given direction the middle one turn in the opposite direction and the right one to the opposite of the middle



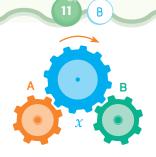
To make the tractor turn to the arrow direction the track B must be faster than A







Each one of A and B will turn in the opposite direction of X, so they turn in the same direction.



The gear with the fewest teeth will turn faster. So the gear B is faster than A.



at the time of braking the water keep its to the Forward due to inertia so it will be as in C